Missouri basin unlikely to experience spring flooding

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Nature's give-and-take will probably spare the Kansas City region from severe flooding in the Missouri River basin this spring, despite a wet winter.

Last year's drought, coupled with lighter-than-normal snowfall in the Rockies and the upper Great Plains, could leave the river running lower than normal through summer. The U.S. Army Corps of Engineers is releasing less water from upstream reservoirs in the Dakotas. Some are still more than 10 feet low because of drought.

Exposed sandbars in the riverbed at Kansas City this winter reflect the corps' efforts to boost upstream reservoir water for release during the coming barge shipping season.

The river usually runs at eight to nine feet during the winter in Kansas City, corps hydrologist Stephen Spaulding said. This winter, it is at six to seven feet.

The river will rise, with depths hitting 13 feet during the summer shipping season. Local rains and snows cause some depth changes. But primarily the flow is controlled by how much water is released from upstream reservoirs.

Low flow coupled with ice jams caused the river to drop below the intakes of some area water companies earlier this winter. Those problems are not expected again. But the corps is hoping a wet spring will raise water levels for the summer barge season without further lowering lake levels upstream, which harms the recreation and tourism industry.

"They'll release enough water for the (drinking) water supply companies, but barely enough,"

Spaulding said. "They'll be releasing just the minimum flows for navigation this year."

That could mean more sandbar groundings for barges and lost profits for shipping companies because barges can't be loaded as heavily, he said.

Winter storms that normally blanket the Rockies and Plains instead dumped snow and rain on the Kansas City region and the upper Midwest. Spring snowmelt runoff in the entire basin is expected to be at least one-third below normal, said Larry Murphy, a corps team leader for reservoir control at the Omaha, Neb., office. Snowpack in the Rockies alone is 60 percent of normal.

"Storms just kept tracking below our reservoir system," Murphy said. "They're just getting light dustings upstream. Essentially during late December and January, we didn't get any water accumulation in the mountains at all."

An experimental warm-water release at Montana's Fort Peck Dam to boost endangered species such as the pallid sturgeon will be canceled because of low water, Murphy said. The release was to mimic a spring rise and use the warmer surface water from a floodgate rather than the cold bottom water released during hydroelectric power generation.

Late winter and early spring snows could rapidly change the low-water conditions. But long-range spring forecasts call for normal temperatures and rainfall, not a deluge, said Steve Predmore, a hydrologist for the National Weather Service in Pleasant Hill.

The upside for Kansas City is less chance for flooding along the Missouri River because the base flow will be slightly lower than normal.

Also, heavier-than-normal snows in December and recent rains have returned most Missouri and Kansas lake levels to normal. Some, such as Tuttle Creek Lake in Kansas and Stockton Lake in Missouri, still need more water after last year's

drought. Many of the Kansas reservoirs dropped last year as drought decreased water intake but also prompted more releases to keep water companies supplied, including those in Johnson County.

Area creeks and streams need a steady 1 to 3 inches of rain before flooding occurs, Predmore said. But Midwestern weather turns quickly.

Heavy spring and summer rains could still create localized flooding along the Missouri River, Predmore said. All the smaller creeks and streams need is one good spring storm to saturate soil and fill water channels, followed by other heavy rains that can cause sudden and extensive flooding.

"We don't have a way to predict spring rains," he said. "I'm sure we'll have some flood warnings."